Please replace the paragraph beginning at page 1, line 1, with the following rewritten paragraph/s:

--BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to the field of non-destructive testing and more particularly to the use of infra-red thermography in non-destructive testing of wires and cables.

2. Discussion of Prior Art--

Please replace the paragraph beginning at page 3, line 14, with the following rewritten paragraph/s:

--The present invention seeks to overcome these problems and provide a more accurate method of determining the extent of damage to the insulation of wires and cables than hitherto known.

SUMMARY OF THE INVENTION--

Please replace the paragraph beginning at page 6, line 23, with the following rewritten paragraph/s:

--BRIEF DESCRIPTION OF THE DRAWINGS

In order to more fully understand the present invention, the following embodiments are described by way of example only and with reference to the accompanying drawings in which:--

Please replace the paragraph beginning at page 7, line 1, with the following rewritten paragraph/s:

--Figure 2a shows a plan view of a loom conducting current.

Figures 2b and 2c show a corresponding display of heat emanating from the wire both with and without the electrolytic fluid; and--

Please replace the paragraph beginning at page 7, line 4, with the following rewritten paragraph/s:

--Figure 3 shows a flow chart of a preferred method in accordance with the present invention.

DETAILED DISCUSSION OF PREFERRED EMBODIMENTS--

Please replace the paragraph beginning at page 8, line 22, with the following rewritten paragraph/s:

-- Figure 2a shows a loom 27 comprising insulated wires 12, 26 positioned between a pair of connectors 25 and conducting current therebetween. Part of the insulation of the wire 12 is damaged around its circumference 13, possibly caused by the wire 12 being tied or clipped to other wires or to a structure (not shown) at that point. The wire 26 has a radial crack 14 in its insulation, possibly caused by impact from a tool (not shown) during installation of the wire.--

Please replace the paragraph beginning at page 9, line 3, with the following rewritten paragraph/s:

--A graph 15 in Fig. 2b of intensity of heat versus distance along the loom 27 prior to the addition of an electrolyte is shown as it might appear on the display apparatus. Where the insulation of the wire 12 is undamaged, the heat intensity is at a datum level 16. Where the insulation of the wires 12, 26 have been damaged 13, 14, small peaks 17, 18 may be displayed corresponding to heat emanating from the wires 12, 26 due to the damaged insulation. Where the damage is hidden from direct view of the camera, no peaks may occur.--

Please replace the paragraph beginning at page 9, line 12, with the following rewritten paragraph/s:

--A graph 19 in Fig. 2c of intensity of heat versus distance along the loom 27 following the addition of an electrolyte (as shown in Figure 1) is shown as it might appear on the display monitor. Where the insulation of the wires 12, 26 is undamaged the heat intensity is at a datum level 16. Where the insulation of the wires 12, 26 has been damaged at 14, a rapid temperature increase is displayed, and a higher temperature plateau 21 is shown between damage sites 13 and 14, corresponding to the heat emanating from the wires 12, 26 due to the damaged insulation and the conduction of the leakage current from the damage site 13 to adjacent damage site 14 via the electrolyte. Particularly where damage is located out of the line of sight of the detector, the addition of the electrolyte allows the leakage current to flow around the insulated wire between damage sites and so enables hidden damage sites to be detected.--